Message

From: Vega, Victoria [Vega.Victoria@epa.gov]

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To: AO OPA OMR CLIPS [AO_OPA_OMR_CLIPS@epa.gov]
Subject: Daily Media Clips: Morning Edition April 22, 2021

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Contributor not listed, Argus Media, Biden calls for US to cut GHG emissions in half

A school bus company based out of Astoria is getting a lift from the U.S. Environmental Protection Agency as it seeks to swap outdated diesel-powered buses with cleaner alternatives.

All American School Bus Corp. will receive a \$200,000 rebate for the replacement of 10 buses in their fleet for models that are electric, use alternative fuels or have diesel engines that meet current standards.

"The rebates provide children with a safe and healthy way to get to school by upgrading older diesel engines in our nation's school buses," said EPA Administrator Michael Regan. "EPA is equipping local school districts with cleaner-running buses, helping them along the route to healthier kids and communities."

Applicants replacing diesel buses with engine models from 2006 and older received between \$20,000 and \$65,000 per bus, depending on the fuel type of the replacement, through the Diesel Emissions Reduction Act.

2020 is the first year the agency offered additional rebates for clean energy alternatives.

Emissions from diesel engines have been linked to pollutants like nitrogen oxides and particulate matter, which have been linked to higher occurrence of aggravated asthma and other health issues.

Since October 2020, the NYC Clean School Bus coalition formed by a group of environmental advocates, parents and community organizations has pushed for the electrification of privately owned school buses serving public schools.

New York City has committed to electrifying the city's public fleet by 2040 under the Climate Leadership Community Protection Act, but that legislation that does not extend to the private sector.

"Part of creating a more equitable and sustainable city is prioritizing the health and safety of children as well as community as a whole through the electrification of school buses," New York Lawyers for the Public Interest community organizer Jenny Veloz said in October. "We should all be fighting to make sure that every community in New York City breathes clean, fresh air."

Emissions

Associated Press, The Mining Journal, 2 Italian managers indicted in Fiat Chrysler emissions probe https://www.miningjournal.net/news/2021/04/2-italian-managers-indicted-in-fiat-chrysler-emissions-probe/

DETROIT — Two Italian managers in Fiat Chrysler's diesel engine program have been indicted by a federal grand jury in Detroit in a widening case alleging a scheme to cheat on U.S. emissions tests.

The indictments unsealed Tuesday detail allegations of a plot to dupe the Environmental Protection Agency by rigging more than 100,000 diesel Ram pickup trucks and Jeep SUVs to cheat on EPA tests and exceed pollution limits on real roads.

Sergio Pasini, 43, of Ferrera, Italy, and Gianluca Sabbioni, 55, of Sala Bolognese, Italy, each face nine charges including violating the Clean Air Act, wire fraud, and conspiracy to defraud the U.S.

The U.S. Attorney's Office in Detroit said neither man is in custody and would not comment when asked if they will be extradited to the U.S.

Both were described by authorities as senior diesel managers with the company. They join Emanuele Palma, 42, of Bloomfield Hills, Michigan, as defendants in the case.

He was charged in 2019 but now faces a new 10-count indictment alleging conspiracy, Clean Air Act violations, and that he made false statements to the FBI and the EPA.

In a statement, the Justice Department said the three men had "co-conspirators" in the scheme, indicating that more charges are possible.

All three are accused of purposely calibrating emissions-control software on 3-liter diesel engines so they met nitrogen oxide emissions requirements during EPA test cycles, yet emitted higher pollution while on the road. They referred to the manipulation as "cycle beating," the statement said.

Messages were left Tuesday seeking comment from Palma's attorneys. It wasn't clear if Pasini or Sabbioni have lawyers.

In a statement, Fiat Chrysler, now known as Stellantis after merging with France's PSA Peugeot, said it's cooperating in the investigation and referred to previous statements denying that it took part in a deliberate scheme to program the engines to cheat on tests.

Palma, Pasini and Sabbioni also are accused of causing others "to make false and misleading representations to FCA's regulators about the emissions control functions of the subject vehicles in order to ensure that FCA obtained regulatory approval to sell the subject vehicles in the United States," the Justice Department statement said.

The cheating helped FCA attain best-in-class fuel economy, making the vehicles more attractive to buyers, prosecutors alleged.

In 2019, Fiat Chrysler agreed to pay hundreds of millions of dollars, including a \$300 million fine to the U.S. government, to settle emissions cheating allegations. Under the deal with the Justice Department and the EPA, the automaker must recall and repair the more than 104,000 out-of-compliance SUVs and pickups. The vehicles were made from 2014 through 2016.

Separately, Fiat Chrysler agreed to pay \$280 million to settle lawsuits brought by vehicle owners — leading to payouts of about \$2,800 per owner — and will pay \$19 million to California to settle similar state regulatory allegations.

Fiat Chrysler has maintained that it didn't deliberately scheme to cheat emissions tests, and the company didn't admit wrongdoing.

Dino Grandoni, Arkansas Democrat Gazette, Car rules ignored experts, EPA says

https://www.arkansasonline.com/news/2021/apr/22/car-rules-ignored-experts-epa-says/

WASHINGTON -- The Trump administration sidelined career staff members at the Environmental Protection Agency when weakening pollution rules for new passenger vehicles, according to a federal watchdog report.

The EPA's inspector general found top political leaders at the agency failed to properly document and consider the concerns of staff experts while unwinding standards for tailpipe emissions set under President Barack Obama.

The report, released Tuesday, may provide fresh fodder for the Biden administration to tighten mileage and greenhouse gas standards for new automobiles as part of a broader effort to phase out internal-combustion engines and drastically cut the nation's climate-warming emissions.

President Joe Biden's team is in the midst of negotiations with carmakers, auto workers and environmentalists for new pollution standards for new vehicles, aiming to protect factory jobs and cut emissions. The industry wants generous government incentives for producing cleaner cars, while labor leaders want to stave off job losses during the transition to electric vehicles.

The outcome of the talks will be crucial for U.S. climate goals because the transportation sector is the nation's largest source of emissions, according to the EPA.

In 2020, the Trump administration finalized a rule compelling car companies to improve the average fuel economy of their fleets by 1.5% a year — a step back from the 5% annual increase set under Obama. Officials argued that forcing automakers to improve the efficiency too quickly would make cars too expensive, prodding people to keep driving older, less safe vehicles.

On paper, the lower emissions standards were signed jointly by the EPA and the Transportation Department's National Highway Traffic Safety Administration. But according to the inspector general's report, EPA Administrator Scott Pruitt decided that the safety agency, and not his own experts, would complete "all modeling and analysis on behalf of both agencies."

The result was that many EPA staff members felt shut out of the process of making one of the agency's most important rules. One manager at its Office of Air and Radiation told investigators that "no one at the EPA ever saw NHTSA's model or input files" in the six months leading up to the release of the final rule.

Jeff Alson, a former engineer at the EPA's vehicles lab in Ann Arbor, Mich., who retired in 2018, said Tuesday that staffers at the two entities worked closely to set greenhouse gas standards for new cars and trucks under Obama. That kind of collaboration didn't happen under President Donald Trump, he said.

"I feel like it really confirmed what I had seen," Alson said of the inspector general's investigation.

The Trump administration's decision also meant the EPA failed to properly analyze the rollback's effects on Americans especially vulnerable to auto emissions, including poor and minority communities often situated near highways and children susceptible to developing asthma, according to the report.

Environmental groups cheered the report's release, as did Democrats in Congress who previously raised concerns about how the Trump administration watered down auto standards.

"Like many things in life, how you conduct yourself matters. This is especially true when it comes to agencies engaged in federal rule making," said Sen. Thomas R. Carper, D-Del., who chairs the Senate Environment and Public Works Committee and who initially requested the inspector general's review. "Government actions affect the health and well-being of people across our country and our planet, so it's critical that these decisions are made through a deliberate, thoughtful process."

Alice Henderson, a senior attorney at the Environmental Defense Fund, said the EPA must now "step up to its statutory role and responsibility to protect human health" as it again considers auto emissions standards. Before the end of the month, the agency is expected to restore California's authority to set its own car pollution rules, which was revoked under Trump. And Biden's EPA chief, Michael Regan, has said the administration is aiming to propose new nationwide limits on greenhouse gas emissions from cars by July.

Nick Conger, a spokesman for Regan, said the agency "appreciates" the inspector general's probe and "values transparency in the rule-making process."

Earth Day

Johnathan Williams, The Washington Post, <u>Americans want climate solutions</u>. Why won't our politicians deliver?

https://www.washingtonpost.com/outlook/2021/04/22/americans-want-climate-solutions-why-wont-our-politicians-deliver/

Ahead of Earth Day and the global climate summit organized by the Biden administration, climate envoy John F. Kerry is busy at work negotiating agreements with individual countries. Yet before the administration and

the United States can fully address the global ecological challenges of the 21st century, it must first reckon with the limits, challenges and failures of modern environmental politics domestically.

For the past 50 years, partisan gridlock has increasingly undermined the chances for legislation on environmental issues — even for policies that are popular with the public. However, the roots of environmental politics offer lessons on how to overcome such obstacles.

When Republican President Richard M. Nixon signed the National Environmental Policy Act (NEPA) on Jan. 1, 1970, it set in motion a new age of environmental politics. NEPA arose during an ecological crisis. Cities were choking from smog and waterways were so polluted that they were nearly depleted of life. Most vividly illustrating the problem, the Cuyahoga River caught fire in Cleveland in 1969.

NEPA created new precedents for the federal government's role in tackling environmental issues. The act entailed a bold, wide-ranging pledge to place environmental concerns at the forefront of national policy, laid the foundation for the Environmental Protection Agency and required environmental impact statements (EIS) for all major federal construction projects.

NEPA was part of a slew of environmental legislation that trickled down from federal to local governments throughout the late 20th century as a political consensus formed over the need to address ecological challenges. For many Americans, especially those living in relatively new suburban communities at the forefront of environmental change, supporting this type of legislation was about more than cleaning up and protecting air, water and land: It was also a quality-of-life issue that called upon American values of sacrifice, ingenuity and citizenship to solve. As Sen. John Sherman Cooper (R-Ky.) explained after the passage of the National Air Quality Act of 1970, the new environmental ambitions required "a massive effort, not only by the Federal Government and States, and localities, but by industry and through the willingness of citizens throughout the country to make the sacrifices necessary and to pay the price of accomplishing the goals of clean air." Such ideas knitted together a diverse political coalition that sought to create bold — and even radical — change.

By the end of the 1970s, federal environmental legislation such as the Clean Air and Water Acts proved tremendously successful. Lakes and rivers, once dumping grounds for sewage and industrial waste, were restored for recreational purposes. Air quality across the country drastically improved, providing benefits to both human health and the economy. Even though this legislation did not extend to all industries, the momentum it created put pressure on industries, such as car manufacturers, to innovate and improve their practices.

Yet, as the decade ended, new challenges emerged. Stories of toxic pollution harming suburban communities swept the country. In places such as Love Canal in New York and Woburn, Mass., the news of toxic waste causing cancer in children spurred public outrage. Communities organized to spread awareness of the plight of industrial waste near residential neighborhoods and demanded congressional action.

Such instances pitted public opinion against irresponsible corporate polluters, once again leading to major federal legislation — the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), more popularly known as Superfund. The idea behind CERCLA was basic: The polluter pays for damages and cleanup. However, enforcing such liability and mitigating environmental damage proved to be a difficult task.

Superfund sites often produced lengthy litigation processes to determine liability, which stalled cleanup projects. The Industri-Plex site in Woburn, for example, had dozens of different industries operating and contributing to polluting the site over a course of a century. Many of them had ceased to exist by the 1980s, making it difficult — if not impossible — to hold all parties responsible for one of the most contaminated places in all of North America.

In response, Congress substantially amended CERCLA in 1986, to create new tools for cleanup and settlements, greater public collaboration and to increase funding.

Yet, this legislation obscured how the very consensus over environmentalism had begun to crack. The Reagan administration pushed back against the environmental policy of the 1970s. Reagan's ascendancy to the Oval Office in 1981 marked a distinct break from previous Republican administrations relating to environmental issues and policies. Unable to dismantle established environmental regulation, the administration instead sought to cripple regulatory agencies such as the EPA under the leadership of Anne Gorsuch, filling the agency with corporate insiders and drastically reducing its budget. Such maneuvering helped to reinforce the idea of government inability to fix problems.

Reagan's anti-environmental stance and the doubts about government's ability to solve environmental problems created by the struggles to carry out Superfund cleanups profoundly affected the future of environmental politics. Securing legislative compromises and solutions became far more difficult.

During the 1990s, Republicans in Congress adopted Reagan's conservative view toward environmental issues, which transformed environmental politics from something that had once produced consensus into a deeply partisan issue. The switch meant an end to major environmental legislation, leaving executive action or administrative reform within regulatory agencies, such as the EPA, as the only viable means to address environmental issues.

But Republicans are not the only ones to blame. Indeed, Democrats have controlled both the executive and legislative branches of government during both the Clinton and Obama years and failed to enact legislation to address recent issues such as climate change, petrochemicals and environmental justice. Reform occurred, but these were largely business-friendly policies that favored voluntary action over actual regulation and enforcement as partisan divides grew.

Oddly, this political gridlock does not reflect public opinion. A majority of Americans, Democrats and Republicans, continue to favor environmental management and protection. When faced with the false question of choosing the economy or environment, Americans still prefer environmental protection — even with the rise of unemployment over the past year. What has emerged is a growing divide between the public and lawmakers over the role of government in managing, conserving and protecting the environment — including people.

Conquering the environmental challenges of the 21st century requires more than executive action and administrative reform — something that, as the Trump years showed, can easily be overturned. Doing so will be essential to maintaining any long-term global commitments to address the climate crisis.

The lessons of modern American environmental politics offer a guide for how to achieve legislative success, which begins with recognizing the immediate, national importance of addressing environmental issues and creating coalitions of support. Enforcing regulations and holding polluters responsible can also help to establish strong incentives for corporations to commit to improving environmental practices. The successes of the past also reveal the need for Congress to find creative solutions for industries and issues not covered under major legislation such as NEPA, the Clean Air and Water Acts and CERCLA. Ambitious legislation to address some of these areas, such as agriculture, plastics and environmental justice, are underway. However, for these bills to pass and the United States to become a global environmental leader again, Congress and the Biden administration need to recognize the science, the need for mass mobilization and to restore consensus politics that align with the American public.

Kenosha News Staff, Kenosha News, <u>Kenosha beach cleanup "after party" to promote local environmental groups' missions</u>

https://www.kenoshanews.com/news/local/kenosha-beach-cleanup-after-party-to-promote-local-environmental-groups-missions/article_3ac88556-6b5f-5030-a96f-bdc78a6033f4.html

An annual local beach cleanup event scheduled for Saturday will conclude with an online "after party" at the Kenosha Yacht Club to promote efforts of environmental groups.

The after party will be live-streamed at 1:30 p.m. on the Kenosha News Facebook page and will give the participating groups an opportunity to share their missions virtually with the public. To access the event, go to https://www.facebook.com/Kenosha.News

The Earth Day-related clean-up event is coordinated by Nancy Carlson, program director of WATERshed, which has been organizing a Kenosha Earth Day beach cleanup for the Great Lake Community Conservation Corps and is collaborating with the Environmental Protection Agency's Trash-Free Waters initiative.

Because of COVID-19, Carlson this year, sought organizations who could commit a small group, about six to 12 people, to clean up Kenosha' beach rather than opening it up as a large community effort. More volunteer opportunities for organizations will be available in city parks coming this summer, according to Carlson.

"Clean ups are very rewarding because you see the results immediately. The EPA's Trash-Free Waters initiative is focusing on preventing trash and litter from entering U.S. waterways. Plastic trash, in particular, threatens human health, aquatic ecosystems, and the economy," she said in a release.

Nancy Carlson (copy)

Nancy Carlson founded the WATERshed Program with the goal of helping to create "water literate citizens" who understand the importance of keeping the watershed system healthy. Since its inception 11 years ago, more than 25,000 fourth- and fith-graders have participated in the program.

WATERshed is working with the Great Lake Community Conservation Corps because they have overlapping missions. In addition to bringing the Trash-Free Waters initiative to the area, the corps addresses climate change, advances greener living and provides education and training for disadvantaged populations in the Great Lakes area. Programs include:

- Veterans Corps programs that offer assistance with transitioning vets into civilian life.
- Go Solar program that offers discounted solar panel installation and a Reduce the Runoff program that provides free landscaping to qualified recipients to minimize rainwater pollution from runoff.
- Certification and Emergency Response Training School out of Racine and Milwaukee that trains 18-20-yearold students to be first responders.

Drew Vass, Door and Window Market Magazine, <u>Amid a Renewed Focus on Climate, Companies Say the Earth</u> is Worth More Than a Day's Celebration

https://www.dwmmag.com/amid-a-renewed-focus-on-climate-companies-say-the-earth-is-worth-more-than-a-days-celebration/

More than 50 years ago today, 20 million Americans took to the streets, across college campuses and hundreds of cities, "to protest environmental ignorance and demand a new way forward," say officials for earthday.org. The activities of that day helped to spur the passage of new environmental laws in the U.S., they say, including the Clean Air Act of 1970, the Clean Water Act and the Endangered Species Act of 1973. The same period also marked the establishment of the Environmental Protection Agency (EPA).

This year, Earth Day lands with renewed gravitas, as President Joe Biden hosts a Leaders' Climate Summit, inviting more than 40 world leaders to gather virtually. But executives of door and window companies remind the industry that sustainability is about much more than a one-day effort or celebration. The industry has a responsibility to operate under the tenets of sustainability every day, suggests Jeld-Wen president and CEO Gary Michel.

"As part of the building products industry, we all have a responsibility to utilize natural resources efficiently and to design products with sustainability in mind, from responsible sourcing to considering the full lifecycle of the materials we use and the products we manufacture," Michel says. Over the past 60 years, Jeld-Wen has invested in initiatives that "benefit the environment and society," Michel suggests, "including making sustainable product design and manufacturing integral to our business, responsibly sourcing renewables, and delivering innovative, energy efficient products and solutions to our customers."

Two other manufacturers, Andersen and ProVia, are celebrating on the heels of consecutive Energy Star awards for sustained excellence. In a companywide video message, ProVia president and CEO Brian Miller says his company is commemorating the accomplishments of its employees by having executive leadership cook and serve breakfast this week, across five of the company's locations.

"Brian's intent in doing this is to put the recognition back to the employees," says the company's director of corporate relations, Joe Klink. "As a company, we got this award, which sits on the counter in our lobby, but it really comes back to all of the employees coming in every day, working hard, making good products, and our engineering team engineering good, efficient products that homeowners can enjoy and use to save energy."

The recent award marks the company's 14th from Energy Star, Miller says in his video, adding, "Just listen to this lineup. We've had four recognitions for Partner of the Year; nine for Partner of the Year Sustained Excellence; and one for Excellence in Promotion. What an accomplishment. We want to celebrate these awards, along with what you've done and accomplished," he tells employees.

In addition to a recent multi-consecutive Energy Star award, officials for Andersen Corp. say they're pausing to celebrate several long-term accomplishments, including reducing water usage by 38% per unit produced, reducing energy usage through relighting and other efficiency projects, and saving more than 9% in fuel usage.

"Our commitment to sustainability is something we practice every day, not just on Earth Day," says Jon Smieja, the company's sustainability manager. "We've integrated sustainability into nearly every aspect of our business."

Today, Andersen is committing to work with a group of students from the University of Minnesota to plant a pollinator garden at a nearby middle school, close to its headquarters in Bayport, Minn., Smieja says.

"This small, but impactful project will provide habitat for key species in our ecosystem and also provide a learning experience for students for years to come," he says. "It will also provide a group of Andersen employees the opportunity to get outside and volunteer safely this Spring."

Meanwhile, at the White House, the Biden administration is heralding a new Special Presidential Envoy for Climate, which holds a seat on the National Security Council, to cement climate action among the nation's top priorities. A recent executive order formally establishes the White House Office of Domestic Climate Policy, led by a new National Climate Advisor and Deputy National Climate Advisor. The move creates a new central office to coordinate and implement the President's climate agenda—including a plan to invest \$213 billion into construction and retrofitting of energy efficient homes and buildings.

Jackie Mason, Yahoo Finance, <u>Propane Council of Texas Highlights Green School Buses on Earth Day</u>
https://finance.yahoo.com/news/propane-council-texas-highlights-green-123200201.html

Thu, April 22, 2021, 8:32 AM·2 min read

AUSTIN, Texas, April 22, 2021 /PRNewswire/ -- The Propane Council of Texas reports that the Lone Star State continues to lead the nation in propane school bus adoption, surpassing California. Thousands of low emission propane-powered school buses transport tens of thousands of kids to school in Texas each day.

Propane's low carbon intensity is why it is an approved clean alternative fuel under the U.S. Clean Air Act. Not only that, but propane school buses reduce particulate matter, deemed a carcinogen by the World Health Organization, to virtually zero in tailpipe emissions.

Ultra-low NOx propane school buses are 90% cleaner than Environmental Protection Agency (EPA) Standards, and in a real-world test conducted by West Virginia University, propane school buses produced 96 % fewer

NOx emissions than clean diesel buses. NOx emissions cause smog, ozone depletion and are said to trigger asthma and other respiratory problems.

Also, propane is not mined like battery materials but is primarily produced from natural gas as a by-product of methane purification, where Texas leads the nation in production.

Because it vaporizes when exposed to air, it has negligible effects on the ozone and does not harm soil, drinking water, or marine ecosystems.

Propane not only offers environmental advantages but economic benefits as well compared to other green alternatives like electric. A propane school bus costs one-third of an electric school bus, and propane refueling infrastructure is also more cost-effective for school districts when compared to electric charging stations for buses.

On Earth Day and every day, propane offers a green option for the community, schools, and our children here in Texas.

The Propane Council of Texas (ProCOT) is a non-profit to dedicated to the education and adoption of propane as a clean, domestic, and affordable energy source. Learn more about propane, propane school buses, and the Propane Council of Texas at www.propanecounciloftexas.org.

Maggie McGrath, Forbes, Earth Day Special: Winona LaDuke And The Women Over 50 Fighting To Save The Environment

https://www.forbes.com/sites/maggiemcgrath/2021/04/22/earth-day-special-winona-laduke-and-the-women-over-50-fighting-to-save-the-environment/?sh=11f49da611bd

Environmental activist Winona LaDuke, center, and "water protectors" stand in front of the construction site for the Line 3 oil pipeline near Palisade, Minnesota, on January 9, 2021. Some Native American communities in Minnesota have opposed the project on the basis of treaty rights. (Photo by Kerem Yucel / AFP) AFP VIA GETTY IMAGES

While the consequences of climate change—rising air and sea temperatures, droughts, extreme storms and even insect outbreaks—have an impact on all humans around the globe, they have a disproportionate effect on women. This is because women are more likely than men to live in poverty and, according to a recent U.N. Environment Programme report, are "often discouraged from learning coping strategies and lifesaving skills, such as how to climb trees or swim," which hampers their ability to escape or even migrate away from extreme weather conditions.

Women are also at the frontlines of the fight to save the earth's environment. From Swedish activist Greta Thunberg to British primatologist Jane Goodall, it is due in large part to the work of women that the public's understanding of nature's benefits —and dangers of carbon emissions—has grown deeper and more nuanced in recent years. It is also due to the work of women over 50. And so, in honor of Earth Day and as a part of our ongoing series, in partnership with Mika Brzezinski and Know Your Value, to highlight women over the age of 50 who are changing the world, here are the women who are fighting to save the environment:

Dr. Sylvia Earle, 85: The legendary oceanographer has been called "Her Deepness" by the New Yorker and "Hero of the Planet" by Time magazine, both for good reason: In 1979, she walked untethered on the sea floor at a lower depth than any living human being before or since. By the early 1990s, she was the first female chief scientist of the U.S. National Oceanic and Atmospheric Association, and today she is a National Geographic Explorer-in-Residence and the founder of Mission Blue, an nonprofit that works to protect the ocean.

"The overall mission of Mission Blue is to stabilize the decline of the planet and make people aware that it is happening and make people aware of what they can do about it," Earle recently tweeted. (Like other leaders, she has taken to Twitter to spread her message—and peppers them with photos of coral reefs, subterranean creatures, sharks and even the occasional sea gull.)

Through Mission Blue, Earle works with 120 communities across 69 countries to restore and protect their local ocean environments. It is working to apply protections to 30% of the world's oceans by 2030, a goal set by the International Union for Conservation of Nature.

"We, as humans, depend on the ocean to stay alive—and the time is now to use our power to protect it," Earle has said.

Lisa Jackson, 59: Born in Philadelphia and raised in New Orleans, Jackson is a chemical engineer who, in 2009, became the nation's first Black administrator of the Environmental Protection Agency (EPA). In 2013, she left the EPA to become Apple's first head of environment, policy, and social initiatives. As such, she is in charge of the company's renewable energy strategy, use of greener materials and progress towards resource conservation.

One of Jackson's newer programs at Apple is something called the Restore Fund, a carbon removal initiative the company announced last week. Launched in partnership with Goldman Sachs and Conservation International, it's a \$200 million fund that will aim to remove at least 1 million metric tons of carbon dioxide annually from the atmosphere while boosting investments in forest restoration.

"Through creating a fund that generates both a financial return as well as real, and measurable carbon impacts, we aim to drive broader change in the future —encouraging investment in carbon removal around the globe," Jackson said. "Our hope is that others share our goals and contribute their resources to support and protect critical ecosystems."

Winona LaDuke, 61: A Native American land rights activist who lives and works on the White Earth reservation in northern Minnesota and who twice ran as Ralph Nader's vice presidential candidate on the Green party ticket (in 1996 and 2000), LaDuke is the founder of the White Earth Land Recovery Project, which works to buy back land that non-natives have acquired. She is also the executive director of Honor the Earth, an organization that educates the public about native land and raises funds to support native communities.

In recent months, LaDuke has been actively protesting against the Enbridge Line 3, a \$2.9 billion oil pipeline project in Minnesota. The project is a 337-mile replacement of a piece of an existing pipeline, but LaDuke and others argue that the carbon emissions from the new piece would be greater than all the emissions Minnesota produces, as a whole, in one year.

"Our way of life is entirely dependent on this water and this wild rice and this land," she has said. And to local press, she noted: "The last place I wanted to be was watching them tear apart my forest limb from limb—it was just devastating."

Katherine Lucey, 61: Lucey spent 20 years on Wall Street working as an investment banker (in the energy sector) before becoming a social entrepreneur working to bring clean energy to communities in Africa. In 2010, she founded Solar Sister, a 501(c)3 nonprofit that trains women on how to use and distribute clean energy solutions—like solar-powered radios, fans, lights and water filters—to their communities.

Lucey first got the idea for the company during a 2008 visit to Uganda, when she met a woman using solar lights in her chicken coop. The more light this woman used, the more eggs her chickens produced—and the more income she had for her farm. It's a model Lucey has replicated thousands of times over; she recently estimated that Solar Sister is working with 5,000 female entrepreneurs across Tanzania and Nigeria.

"The work we do has never been more important, because what we do is really giving women a way to earn an income in a very flexible and resilient manner," Lucey told environmental blog Clean Technica, noting that income that women are earning through Solar Sister has kept some families afloat during the pandemic. "Solar power is distributable, makes people in control of their own energy and sources. It creates a sense of independence and it just fits in so many ways with the work of these women entrepreneurs on their own terms," she says.

Solar Sister has received plaudits from the Clinton Global Initiative, Social Venture Network, and most recently, the Greta Thunberg Foundation.

Administration

| Joseph Morton, Roll Call, <u>Brenda Mallory to take environmental policy in a new direction</u> |
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| https://www.rollcall.com/2021/04/22/brenda-mallory-to-take-environmental-policy-in-a-new-direction/ |
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| Brenda Mallory's supporters say her decades of environmental law experience qualify her as the best choice to lead the White House Council on Environmental Quality. |
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| But she also brings a new perspective to the role as the first African American to hold the position, one shaped by her humble beginnings in Waterbury, Conn. |
| "That's really important when we're talking about environmental justice, that we have someone whose life experiences |
| teach her about what that means," said Jeffrey Gleason, executive director of the Southern Environmental Law Center. |
| The center hired Mallory last year as its regulatory director, impressed by a lengthy résumé that includes representing |
| private sector clients, working at the highest levels of the federal government and helping lead environmental law organizations. |
| On Wednesday, the Senate voted 53-45 to confirm Mallory as the head of the CEQ, which is responsible for developing |
| and coordinating the administration's environmental policies. |
| |
| The council implements the National Environmental Policy Act, or NEPA, which governs environmental reviews and |
| permitting for major infrastructure projects such as highways and pipelines. It will have a central role in the Biden administration's focus on environmental justice and prioritizing the needs of minority communities affected by pollution and climate change. |
| |
| "I will ensure that the voices of the poor and the powerless, from the most rural parts of America to our biggest cities, are heard as we tackle the environmental and public health crises the nation faces," Mallory said during her confirmation hearing. |
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| |

She cited the values instilled by her late parents. She told her hometown paper, the Republican-American, in 2014 that she was influenced by her father, Rev. Thomas Mallory, and his work as an investigator for the Connecticut Commission on Human Rights and Opportunities. As a young person, she worked with him during summers.

"I grew up with that interest in my environment," she told the paper then. "I was really interested in civil rights issues and was just getting some experience about how the law and policy can impact changes in that area."

Educational pathway

Her life took a turn after she landed a scholarship to the private Westover School. She graduated from Yale University and then Columbia Law School before going into private practice. She helped businesses navigate the regulatory process and served as chair of the natural resources group at the environmental law firm Beveridge and Diamond.

Mallory later went to work at the Environmental Protection Agency. Ann Klee, who took over as the agency's general counsel in 2004, recalls how Mallory stood out for the breadth and depth of her knowledge about the agency and environmental law, as well as her willingness to challenge assumptions in a constructive way.

"She became one of my top go-to people to brainstorm with, to help me think through some of the tough issues and to challenge my thinking in a way that made all of our work product better," Klee said. "I could trust the fact that she was going to bring really good judgment and not partisan politics to the debate."

Klee was among the former Republican officials who signed a letter in support of Mallory's nomination. She predicted that Mallory will be a major player on the toughest issues facing the administration, including climate change, environmental justice and improving the NEPA review process without gutting it.

"There is a real need to invest in our infrastructure, and part of that means you can't get mired in decades of litigation," Klee said.

Mallory was the principal legal adviser for the EPA's pesticide and toxic substances program when President Barack Obama named Scott Fulton the agency's general counsel in 2009. One of Fulton's first moves was to recruit Mallory to serve as his principal deputy, a position Fulton described as the office's chief operating officer.

Fulton, now president of the Environmental Law Institute, said he gave Mallory wide latitude as the administration tackled initiatives ranging from the interpretation of water statutes to regulating greenhouse gas emissions. He said she has a deep knowledge of environmental justice, climate change and just about every other environmental issue. "I don't know whether CEQ has ever had a chair that had as much cross-programmatic strength as Brenda does," he said.

He also noted that she has represented business interests and understands their perspective.

"While I'm sure she feels strongly about the issues that are on the to-do list for the Biden administration, [Brenda] is not an ideologue," he said. "She rather is interested in finding the path to the best solutions."

Critical comments

Republicans on the Senate Environment and Public Works Committee highlighted her past comments critical of the Trump administration's attempts to overhaul the NEPA. Sen. Shelley Moore Capito, R-W.Va., noted that the Obama administration, in which Mallory served as general counsel of the CEQ, made no effort to modernize the regulations.

"We talked about this in our hearing with the governors, how the permitting for transportation and infrastructure projects goes on for so long, a lot of it under the NEPA regulations. ... It costs money and people abandon projects after a while," Capito said. Those who have worked with Mallory say such concerns are off base. Gleason said she's not going to be a "wild advocate" in her new role and cited her experience representing private sector clients.

"I'm sure there will be times when we will wish she were pushing harder, and likewise there will be times that business may feel that she's pushing too hard," he said. "But she's going to take a very even-handed approach to the issues. She will definitely listen to all perspectives."

He also pushed back on GOP suggestions that she will simply be doing the bidding of top White House climate officials such as Gina McCarthy and John Kerry.

"I can promise you that Brenda will be no one's puppet," Gleason said.

Biden Administration

Nicholas William Targ and Indigo Brown, Holland & Knight, <u>Environmental Justice in the Biden Administration:</u>
Early Actions Draw First Bold Lines

https://www.hklaw.com/en/insights/publications/2021/04/environmental-justice-in-the-biden-administration?utm_source=Mondag&utm_medium=syndication&utm_campaign=LinkedIn-integration

Highlights

The Biden Administration in its first 90 days has clearly and dramatically articulated a commitment to the issue of environmental justice.

The actions of the White House and the U.S. Environmental Protection Agency (EPA) are significant in their own right, and point to programmatic, regulatory and budget initiatives likely to emerge over the coming months and years.

This Holland & Knight alert is the first of several status updates on environmental justice (EJ) in the Biden Administration. It identifies early actions of the administration that are not only significant in their own right but point to programmatic, regulatory and budget initiatives likely to emerge over the coming months and years. Holland & Knight

will continue to monitor and provide insights into these policies, priorities, regulatory actions and the inevitable, attendant litigation. Subsequent status updates will document these actions with the goal of helping clients better understand how they may be affected by (and can effect) environmental justice change.

Introduction

The Biden Administration in its first 90 days has unambiguously articulated a commitment to the issue of environmental justice.1 The actions of the White House and the U.S. Environmental Protection Agency (EPA), in particular, are significant and portend further policy and legal changes that will shape the regulatory landscape over the coming years. In the first three months since taking office, the White House:

issued Executive Order (E.O. 14008), addressing EJ, climate change and equity issues; notably, President Joe Biden signed the E.O. within first several days of taking office

created two new White House councils to address EJ implementation and solicit expert advice and recommendations, and

signed legislation providing significant funding for EJ-related programs in the recently enacted \$1.9 trillion American Rescue Plan Act2

Moreover, in response to the Executive Order, the recently confirmed EPA Administrator Michael Regan directed all offices within the Agency to:

[s]trengthen enforcement of violations of cornerstone environmental statutes and civil rights laws in communities overburdened by pollution

[t]ake immediate ... steps to incorporate environmental justice considerations into their work ... in regulatory development processes

[t]ake immediate and affirmative steps to improve early and more frequent engagement with pollution-burdened and underserved communities, and

consider and prioritize direct and indirect benefits to underserved communities in the development of requests for grant applications and in making grant award decisions, to the extent allowed by law.3

Recognizing the central policy role that EJ will play in the Biden Administration and understanding how EJ issues can affect businesses and communities will be key to avoiding pitfalls and spotting opportunities.

EJ Actions to Date and Likely Next Steps

Raising the Profile of Environmental Justice Under the Biden Administration

Among the executive actions denominated as "environmental justice" within first 90 days, President Biden's issuance of E.O. 14008 stands out. The E.O. emphasizes EJ's integration into the actions of the U.S. government. The E.O.'s focus on issues of climate change, economic revitalization and job creation shows an evolution from the first – and still in effect – EJ Executive Order (E.O. 12898), signed by then-President Bill Clinton in 1994.4

Specifically related to EJ, and linking the issue to economic development and job creation in a way that E.O. 12898 did not, the new Executive Order aims to conserve public lands and waters and improve air and water quality, and in this effort "create well-paying union jobs and more opportunities for women and people of color in hard-hit communities."5

The E.O.'s attention to union jobs and opportunities in an inclusive workforce, recognizes the coalescence and new power of the "blue-green alliance" and "just transition" strategy within the administration and EJ movement, more generally. Themes of economic justice, union participation and economic revitalization of disadvantaged communities should be expected alongside or integrated with more traditional EJ goals, such as: environmental quality; protection of culturally important places (i.e., sacred sites); and community involvement in the decision-making process.

This expectation is largely confirmed by the E.O.'s creation of the "Justice40 Initiative." This cross-agency initiative sets a goal that 40 percent of the overall benefits from federal investments flow to disadvantaged communities.6 The announcement of the initiative in the E.O. clearly communicates the administration's attention to revitalization of, and prioritizing resources to, EJ communities. An early test of the of the Justice40 Initiative will be the role that it plays in the forthcoming infrastructure bill and the extent to which the infrastructure bill achieves the Justice40 Initiative's goal.

The E.O. also calls on the chair of the White House Council on Environmental Quality (CEQ) to develop a Climate and Economic Justice Screening Tool that will "highlight disadvantaged communities." 7 Such EJ screening tools can be used to prioritize disadvantaged communities (e.g., for grantmaking purposes) and to evaluate outcomes (e.g., allocation trends, changes in environmental quality). CEQ is likely to consider the EPA's Environmental Justice Screening and Mapping Tool (EJSCREEN) and, potentially, the older Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT) in the development of the tool. CEQ's screening tool is also likely to bear similarity to comparatively well-developed California Community Environmental Health Screening Tool (CalEnviroScreen), which is now in its fourth version, and that is used in the prioritization of certain state funding allocations as well as in the environmental permitting and site remediation context. It is foreseeable that the CEQ-developed tool or closely related screening tools will be used by other agencies to assure a level of consistency across the federal government in the implementation of EJ or other equity-related strategies (e.g., allocating enforcement/compliance resources, funding activities to improve health outcomes, prioritizing communities housing and infrastructure funds, etc.). Given the to-be-developed tool's potential importance and reach, it is reasonable to assume that it will receive substantial attention as it is adopted and implemented.

Finally, E.O. 14008 establishes institutional mechanisms to coordinate EJ strategies within the federal government and to engage with non-federal government stakeholders on EJ policy and programmatic issues. The E.O. establishes two White House-level EJ "councils" to achieve these goals, including the:

White House Environmental Justice Interagency Council (WHEJIC), which is composed of federal agencies, and is tasked with developing a strategy to address current and past environmental injustices and developing clear performance metrics to ensure accountability,8 and

White House Environmental Justice Advisory Council (WHEJAC),9 which is chartered under the Federal Advisory Committee Act and composed of non-federal stakeholders. This council is tasked with providing advice and recommendations to the chair of the CEQ and to the WHEJIC on how to address environmental injustices.10 Again, communicating the key position that environmental justice is being given early in the administration, the WHEJAC held its first meeting on March 30, 2021, approximately 60 days after the E.O. was issued. Presenters included: Vice President

Kamala Harris; EPA Administrator Michael Regan; Senior Director of Environmental Justice at CEQ, Cecilia Martinez; and National Climate Advisor Gina McCarthy.

In addition to establishing new EJ policy initiatives through the E.O., last month President Biden signed the \$1.9 trillion coronavirus economic stimulus relief package, the American Rescue Plan Act of 2021 (Act).11 Consistent with the E.O.'s prioritization of funding for disadvantaged communities, Title VI, § 6002, of the Act appropriates \$100 million to the EPA to address health outcome disparities from pollution and the COVID-19 pandemic.12 The Act also designates \$50 million to grants, contracts and other agency activities that identify and address disproportionate harms and risks on minority and low-income populations, and another \$50 million to grants and activities in order to monitor and improve air quality.13

In sum, the Biden Administration's attention to EJ in the first 90 days is significant in terms of scope, speed and visibility. It is noted that the administration's grouping of EJ policy initiatives is consistent with the cross-cutting "comprehensive approach" to environmental justice, which includes: 1) a broad policy directive to address EJ; 2) a standard by which EJ communities can be defined and results measured (here, the CEQ EJ screening tool); 3) a strategic/coordinating body and mechanism to allow for representative engagement by the members of the EJ community and to allow for crossagency coordination; and 4) funding for specific initiatives.14 The primary advantage of this organizational structure is that the policy directive can be implemented across a broad range of issues and agencies, while maintaining a relatively high degree of consistency and coordination. This policy approach is consistent with approaches employed by several states across the country.

Environmental Justice Likely Next Steps

The high-visibility EJ actions already taken place and the organizational structure established by the administration likely presage additional measures. Some of these "next steps" will almost certainly involve actions that align closely with traditional EJ principles (e.g., enhanced community engagement and public participation) in agency decision-making. Other actions are likely to involve funding and programmatic actions (e.g., prioritization of funding for Brownfields revitalization and drinking water infrastructure in EJ communities), while still others are likely to be of a regulatory nature (e.g., consideration of cumulative impacts in the permitting process). The following are EJ measures likely to be considered in the intermediate near term:

requirements in grant applications to describe how community-based organizations will be part of a grant's implementation and funding disbursement

prioritizing infrastructure bill funding toward the revitalization of, and investment in, EJ and other disadvantaged communities

revisiting the Trump Administration's prohibition on Supplemental Environmental Projects (SEPs) – environmentally beneficial projects undertaken in consideration of a partial reduction of an enforcement penalty – in administrative and judicial settlements

revisiting the Trump Administration's EPA rule prohibiting the Agency's Environmental Appeals Board from considering policy issues and E.O. mandates (including EJ issues) in permit review decisions

renewed attention to measures designed to reduce lead exposure

the development of the Climate and Economic Justice Screening Tool and updating existing tools, such as EJSCREEN, to facilitate and coordinate EJ activities across federal agencies

Given the renewed attention to environmental justice the authors are aware of several companies and nonprofits that are evaluating their policies with respect to environmental justice, considering their facilities' respective physical

locations (including with respect to, e.g., demographics, proximity to current and former sources of pollutions), keeping an eye out for regulatory changes and opportunities (e.g., SEPs) and considering whether measures should be taken in response.

The Administration's Road to Environmental Justice Will Not Be Without Its Challenges

While some policy and funding actions can enlarge the "pie" (e.g., increasing the scope and amount of benefits conferred to EJ communities) and are not highly controversial, other EJ policy and adjudicatory decisions may require "management of change" (e.g., decisions involving permits, public engagement processes and timing, allocation of funding) and raise issues of federalism (e.g., state compliance with the disparate impact regulations implementing Title VI of Civil Right Act of 1964).

Over the coming months and years, the Biden Administration is likely to confront these more challenging and potentially fraught issues. By way of example only, issues the administration is likely to confront in the mid- and longer-term include:

consideration of EJ in the permitting context, including but not limited to, considering: the physical location of the subject facility and its surrounding characteristics; and evaluation of changes in "GHG co-pollutants" in cap-and-trade programs under the Clean Air Act

establishing clearer (and potentially more stringent guidance) on compliance with the "disparate impact" provisions of the regulations implementing Title VI of the Civil Rights Act of 1964

heightened emphasis on EJ and cultural resource issues in the National Environment Policy Act (NEPA) review process

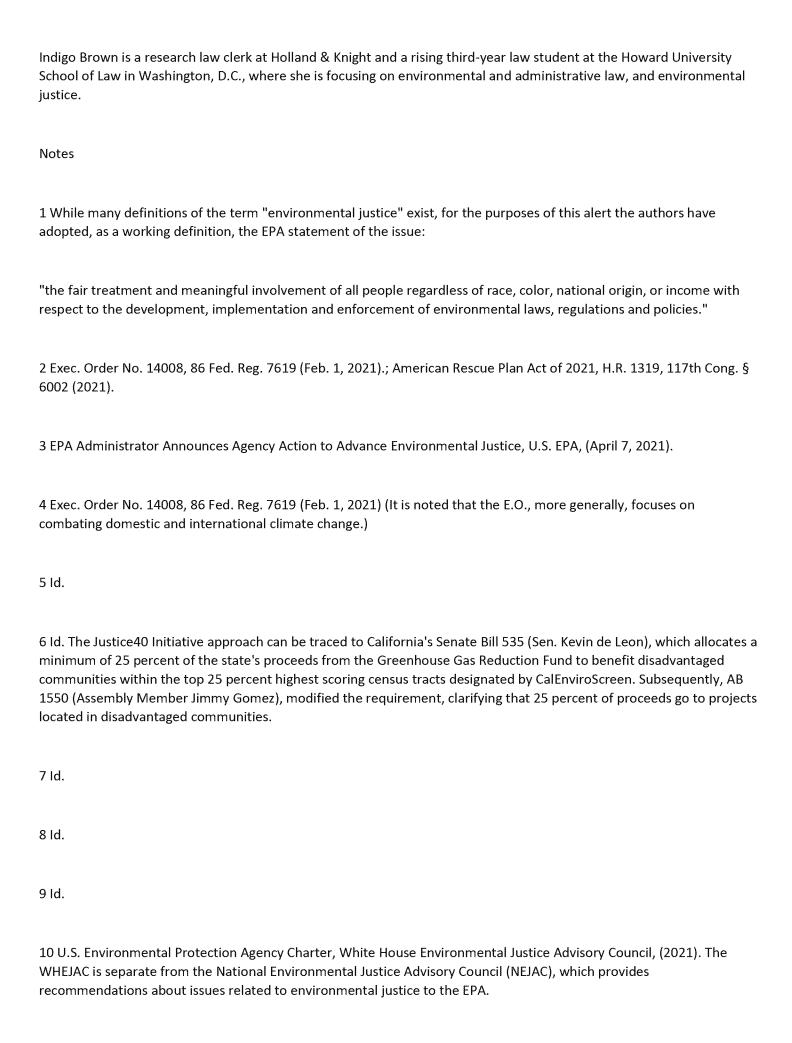
focusing enforcement resources on facilities located in EJ communities

It is also anticipated that regulatory actions and policy decisions may raise tensions between the "mainstream" environmental groups and EJ organizations (e.g., around cap-and-trade policies, policies that tend to raise the cost of housing and utilities to achieve region-wide or national greenhouse-gas reduction goals).

Conclusions

The Biden Administration has been fast out of the gate in raising the profile of EJ, making commitments, taking renewed steps to address conditions in environmentally burdened communities and linking job creation to improving environmental quality. The administration's success around the issue of environmental justice is likely to be measured on the basis of its ability to make and document tangible improvements in EJ communities, to enhance community engagement and to resolve case-specific issues that are likely to arise (e.g., management of environmental crises especially impacting environmental justice communities) in a fair, transparent manner. The administration's success is surely also to be measured on its ability to negotiate the tensions inherent in regulatory change.

In forthcoming EJ status updates, Holland & Knight will track the administration's measures to address environmental justice, identify trends as they emerge and make recommendations. If you have questions about assessing environmental justice changes or need additional background, please contact Partners Nicholas Targ, Rich Gold or Jennifer Hernandez.



| 11 American Rescue Plan Act of 2021, H.R. 1319, 117th Cong. § 6002 (2021). |
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| 12 ld. |
| 13 ld. |
| 14 Nicholas Targ, "State Comprehensive Approaches to Environmental Justice" in Power, Justice and the Environment: A Critical Appraisal of the Environmental Justice Movement (MIT Press 2005). |
| Michael Ball, Argus Media, Biden calls for US to cut GHG emissions in half |
| https://www.argusmedia.com/en/news/2207835-biden-calls-for-us-to-cut-ghg-emissions-in-half |
| President Joe Biden is pledging the US will cut its greenhouse gas (GHG) emissions to half of 2005 levels by the end of the decade, as he seeks to spur new global actions to address climate change. |
| Biden today will commit the US to reduce its emissions by 50-52pc from a 2005 base year by 2030, as he opens a two-day virtual climate summit to be attended by 40 world leaders. That commitment will form the basis of the US' new nationally determined contribution (NDC), or emissions pledge, under the Paris climate agreement. |
| The White House is hoping that by promising to make such cuts the US can persuade other nations to set their own, more aggressive targets under the agreement. |
| The new pledge will "give us significant leverage in pushing for climate action abroad," an administration official said. |
| The White House developed the target after consulting with relevant agencies and stakeholders to determine what level of emissions reductions are possible across the economy, accounting for factors such as technologies, future costs and the potential standards and incentives that could be used to reduce emissions. |
| The administration official said the target does not envision any specific sector-by-sector emissions cuts, but instead recognizes there are "multiple paths" to reducing US emissions. |
| A White House fact sheet accompanying the announcement lights the president's proposal to eliminate GHG emissions from the electricity sector by 2035, as well as his support for setting more aggressive fuel economy and tailpipe CO2 standards for new cars and trucks, the top two sources of US emissions. |

The transportation sector accounted for 29pc of US emissions in 2019, followed by electricity generation at 25pc, according to the latest US Environmental Protection Agency (EPA) data.

The US under former president Barack Obama pledged to cut its GHG emissions by 26-28pc by 2025 from 2005 levels to help achieve the Paris agreement's goal of keeping global temperatures from rising by more than 2°C above preindustrial levels.

The White House said the country is on track to meet Obama's pledge, with the new target keeping the US on pace to help limit the global increase in temperature to 1.5°C.

US emissions totaled just under 6.6bn metric tonnes in 2019, nearly 12pc below 2005 levels, according to EPA.

A 50pc cut would put the US pledge on par with the near-term commitments made by many of the major economics under the Paris agreement, according to a recent Rhodium Group analysis.

While many environmental groups have already cheered the announcement, some are pushing back against Biden's new target, saying it falls short of what is needed to limit the rise in global temperatures.

"While many will applaud the president's commitment to cut US emissions by at least half by 2030, we have a responsibility to tell the truth: It is nowhere near enough," Sunrise Movement political director Evan Weber said.

The White House noted that the 50pc target is being supported by hundreds of businesses, along with many US state and local leaders and scientists.

Republicans in the US Congress are warning that Biden's efforts could hurt the country's economy.

"President Biden's decision to force America back into the Paris climate accord and increase our commitments could severely hamper our global competitive edge to the benefit of the Chinese Communist Party, the world's top carbon polluter," said US representative Cathy McMorris Rodgers of Washington state, the top Republican on the House Energy and Commerce Committee.

Technology

Contributor not listed, Waste360, EPA Awards \$400,000 to Los Angeles Small Business to Support Commercialization of Environmental Technologies

https://www.waste360.com/plastics/epa-awards-400000-los-angeles-small-business-support-commercialization-environmental

LOS ANGELES - Today, the U.S. Environmental Protection Agency (EPA) announced \$400,000 in grant funding to Los Angeles-based Lucendi, Inc. to further develop and commercialize technology to protect public health and the environment. Lucendi will use the funding to build a portable, automated platform for microplastic identification and characterization which will improve the ability to monitor and assess the impact of microplastic pollution on water quality.

"The Lucendi team is excited to have been selected by EPA to advance and commercialize our portable platform," said Lucendi CEO Maxim Batalin. "Microplastics pollution is a global problem that requires innovative and scalable solutions, andith EPA's assistance we are on the right track to help mitigate this problem."

"Lucendi is applying innovative technology to the complex issue of microplastics pollution," said EPA Pacific Southwest Laboratory Services and Applied Sciences Division Director Duane James. "I congratulate Lucendi for receiving this funding. Their work helps us achieve our goal of creating healthy, clean, and safe environments, and EPA is proud to continue supporting these efforts."

ADVERTISING

Lucendi is among eight small businesses nationwide receiving up to \$400,000 in Phase II funding from EPA's Small Business Innovation Research (SBIR) program. These companies were previously awarded SBIR Phase I funding of up to \$100,000 for "proof of concept" of their innovative environmental technologies and are now receiving Phase II funding to further advance and commercialize the technology. Funded technologies are focused on clean and safe water, air quality monitoring, land revitalization, and sustainable materials management.

EPA is one of 11 federal agencies that participate in the SBIR program, a competitive program that supports small businesses in the development and commercialization of technological solutions. This program stimulates the economy while assisting the country in meeting its research and development needs.

For more information on EPA's SBIR Phase II recipients, visit: https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/recipients.display/rfa_id/680/records_per_page/ALL.

Learn more about EPA's SBIR program: https://www.epa.gov/sbir.

Learn more about the Federal SBIR Program: www.SBIR.gov.

Health

Osub Ahmed, Center for American Progress, <u>5 Ways To Improve Maternal Health by Addressing the Climate</u> Crisis

https://www.americanprogress.org/issues/women/reports/2021/04/22/498615/5-ways-improve-maternal-health-addressing-climate-crisis/

The global climate crisis is anticipated to have far-reaching effects—from rising sea levels to hotter temperatures to more frequent extreme weather events—all of which are expected to negatively affect human health. New research is also helping the public to better understand how climate change will negatively affect maternal health outcomes, such as by increasing the risk of preterm birth, pregnancy-related complications, and poor maternal mental health. The United States' maternal health crisis makes the threat climate change poses to pregnant and postpartum people all the more alarming. Among developed countries, the United States has one of the highest maternal mortality rates in the world, and Black pregnant and postpartum people are three times more likely to die from pregnancy-related complications compared with their white counterparts.1 Thankfully, as part of the Black Maternal Health Momnibus Act of 2021, Rep. Lauren Underwood (D-IL) has taken on these intersecting crises by introducing the Protecting Moms and Babies Against Climate Change Act earlier this year.2 Federal and state policymakers must continue to build on this bill, as well as other federal and state efforts, to mitigate and protect pregnant people and new parents from the worst impacts of a changing climate.

In recognition of Earth Day, this issue brief presents five policy recommendations that would improve maternal health by addressing the effects and impacts of climate change, including:

Targeting resources to pregnant and postpartum people living in climate-affected areas

Improving the quality and resiliency of housing and local infrastructure

Developing a national heat vulnerability index to protect pregnant and postpartum people against extreme heat

Expanding access to maternal telehealth services

Improving access to family planning services

By advancing these recommendations, federal and state policymakers can preemptively address the looming crisis posed by climate change and ensure that pregnant and postpartum people—in particular, women of color—are equipped with the resources and protections they need to experience healthy pregnancies.

Direct effects of climate change on maternal health

There are a range of climate risk factors that directly affect maternal health, including extreme heat, air pollution, flooding, and hurricanes. It is also important to note that experiences with climate change vary by race, income, geography, and a host of other factors. People of color—including Black, Hispanic, and Indigenous people—are more

likely to be negatively affected by climate risk factors than their white counterparts. The same holds true for people with disabilities and LGBT people.4

Research has demonstrated the negative effects of extreme heat on maternal health outcomes. For example, exposure to extreme heat has been linked to preterm birth—which itself can lead to long-term infant morbidity and mortality—due to maternal dehydration, the inability to efficiently thermoregulate during pregnancy, and issues related to nutrient and gas exchange across the placenta.5 A research study found that a 10-degree Fahrenheit increase in weekly average temperatures was associated with an 8.6 percent increase in rates of preterm delivery.6 Relatedly, a Nature Climate Change article concluded that without climate intervention, 42,000 more infants will be born preterm annually by the end of the century due to higher ambient temperatures.7 Extreme heat can also lead to congenital heart defects and stillbirth.8 Exposure to extreme heat will vary according to race and geography, among other factors. For instance, Black and Hispanic people in the United States predominantly live in the South, Southwest, and West,9 regions that are projected to experience more extreme heat.10

Similarly, air pollution can have deleterious effects on maternal health, leading to preterm birth, low birth weight, and stillbirth due to changes in the maternal cardiopulmonary system, systemic inflammation, and placental injury.11 A study examining the association between air pollution and poor maternal health outcomes found that in the 10 years after a California coal power plant closed, there was a 27 percent reduction in the rate of preterm births in the surrounding region.12 The effects of air pollution on maternal health are more pronounced for women of color, including Black mothers.13 Indeed, communities of color and low-income communities are more likely to live near polluting power plants and other hazardous facilities and experience cumulative negative health effects due to this exposure.14

Natural disasters such as hurricanes and flooding—which are predicted to become more intense and frequent in coming years 15—also affect maternal health. Women exposed to hurricanes are at increased risk of having low birth weight infants: A study found that exposure to wind speeds at or above 74 miles per hour was associated with a 21 percent increase in the risk of extremely preterm delivery. 16 Flooding also poses risks to maternal health. Following a flood in North Dakota, researchers determined that rates of maternal medical risks, including eclampsia and uterine bleeding; low birth weight; and preterm birth increased. 17 There are also maternal mental health implications of experiencing a climate event, including post-traumatic stress disorder. 18 Researchers continue to work to understand the causal pathways and associated risks that influence how natural disasters can lead to these poor maternal health outcomes.

Policy solutions to safeguard and improve maternal health

Climate change will undoubtedly exacerbate the existing maternal health crisis and pose serious health risks to pregnant and postpartum people and their infants. For that reason, federal and state policymakers must take urgent action by targeting resources to where they are needed most, developing more robust data standards related to climate and maternal health, and expanding access to maternal health services through telehealth as well as reproductive health care services, including contraceptives.

Targeting resources to pregnant and postpartum people living in climate-affected areas

Federal and state policymakers must ensure that relevant agencies, including the U.S. Department of Health and Human Services (HHS) and state departments of health, are taking action to arm pregnant and postpartum people living in climate-affected areas with the critical supports they need. The Protecting Moms and Babies Against Climate Change Act, a landmark bill introduced in Congress this past February by Rep. Underwood, would help do just that by

authorizing HHS to designate "climate change risk zones"—areas where pregnant and postpartum people are more likely to have poor maternal and infant health outcomes due to climate change. This designation process would be similar to how the Health Resources and Service Administration designates Health Professional Shortage Areas and how the Centers for Disease Control and Prevention uses its Social Vulnerability Index.19

As part of this designation process, HHS would issue a notice of proposed rulemaking to collect public feedback on the criteria needed to select these zones. In addition to race and ethnicity, the potential criteria cover many of the social determinants of health, including health insurance status, access to maternal health providers, income levels, and access to quality housing, transportation, and nutrition. Once HHS selects these criteria and designates climate change risk zones, the agency would fund a range of entities, including community-based organizations and local and state health departments, to provide supports to pregnant and postpartum people living within these zones. This funding can be used to train maternal health care providers and doulas on the health risks associated with climate change; provide pregnant and postpartum people with direct financial assistance and help accessing high-quality housing, transportation services, and items such as effective cooling systems and air filtration units; and develop other initiatives to mitigate the impact of climate change on pregnant and postpartum people in these zones.

Improving the quality and resiliency of housing and local infrastructure

In addition to designating climate change risk zones, it is critical that the U.S. Environmental Protection Agency (EPA) issue updated weatherization protocols to encourage federal and state weatherization assistance programs, federal housing programs, home performance organizations, and general contractors to prioritize energy efficiency improvements and other weatherization updates for vulnerable individuals.20 Indeed, as more people move indoors to escape extreme weather conditions, protecting indoor air quality for pregnant and postpartum people, particularly those living in poor-quality housing, will become even more important. Weatherization can protect the indoor home environment by reducing the health and safety risks of extreme heat, cold snaps, flooding, and other extreme weather events made worse by climate change.

Preventing and mitigating the effects of climate change also requires federal policymakers to tackle the issue of extreme heat, its disproportionate impact on pregnant and postpartum people, and the racial disparities that underlie healthrelated morbidity and mortality. That is why a provision in the Protecting Moms and Babies Against Climate Change Act—which would allow stakeholders to develop initiatives to improve local infrastructure—is crucial.21 This provision would help address the "heat island" effect, wherein cities—due to an abundance of roads, buildings, and other infrastructure that more readily absorb and retain heat compared with vegetation and water—can be up to 22 degrees Fahrenheit hotter than outlying rural or nonurban areas.22 The heat island effect is even more pronounced in cities and neighborhoods with majority nonwhite populations, a product of the United States' shameful legacy of redlining. Based on analyses of Home Owners' Loan Corporation maps from the 1930s, researchers have determined that historically redlined neighborhoods are currently hotter than nonredlined neighborhoods—in some cases, even 7 degrees Fahrenheit hotter—due to these neighborhoods' built environments.23 As a result of decades of disinvestment, these neighborhoods have comparatively fewer green spaces and tree canopies and more heat-retaining roadways and large buildings. Increasing tree canopies and installing infrastructure such as cool roofs and cool pavement—with priority given to low-income, minority, and historically redlined neighborhoods—would help reduce ambient temperatures, provide relief from direct sun exposure, and reduce air pollution levels.24 These are all necessary steps to ensure that the health of pregnant and postpartum people, particularly in communities of color, is protected.

Developing a national heat vulnerability index that better protects pregnant and postpartum people

In order to prevent heat-related maternal morbidity or mortality, federal policymakers must also develop and disseminate standards, such as a national heat vulnerability index, that states and local governments can use as a model to ensure better uniformity in assessing exposure to extreme heat. This index must consider the risks posed to vulnerable groups, including pregnant and postpartum people.

Since the Clean Air Act was passed in 1963, the federal government has developed clear data collection and enforcement standards related to air quality. For example, state and local agencies are required to provide the public with daily air quality reports using the EPA's Air Quality Index. Based on measurements of key air pollutants, this index assigns an overall air quality grade organized into six categories, ranging from "good" to "hazardous," with special alerts for sensitive groups, including pregnant people.25 While no federal legislation exists to compel the federal government to develop similar measures for extreme heat, the need for these standards to safeguard maternal health is no less urgent.

Some states, including New York, Wisconsin, and Vermont, have proactively created their own heat vulnerability indices 26 to help residents and state and local officials better anticipate and plan for extreme heat. In some cases, they have even developed interactive databases to determine county- and neighborhood-specific risk. However, each state appears to use different data to assess vulnerability to extreme heat, and none of these data relate to pregnant women or women of reproductive age. A national heat vulnerability index would help to address this issue.

Expanding access to maternal telehealth services

In the face of climate change, states must continue to expand access to telehealth services, particularly maternal telehealth services, and the federal government must make long-needed investments to improve telehealth infrastructure. Telehealth would allow women to reduce their exposure to hazardous environmental conditions by accessing health care services remotely, from the comfort of their homes, as well as to overcome transportation and other logistical barriers.

In order to expand access to maternal telehealth services, more states should permit patients' homes to serve as eligible originating sites, or the location where a patient is allowed to receive remote health services.27 This will ensure that the services a pregnant or postpartum person receives at home are covered by their insurance. States can also expand the list of providers allowed to provide telehealth services to include advanced practice clinicians and midwives, which not all states currently permit.28 Finally, given the issue of maternity care deserts and lack of available and qualified maternal health providers, states should also adopt multistate licensure compacts, such as the Interstate Medical Licensure Compact,29 to allow providers who would otherwise be unable to provide care across state lines to render care to women living in maternity care deserts, including in areas affected by climate change.

Improving access to family planning services

Federal and state policymakers must also improve access to family planning services to ensure that people can make pregnancy and family planning decisions that work for them in the context of a changing climate. Studies have shown that, in the wake of climate disasters, women—particularly Black women—have greater difficulty in obtaining contraceptives.30 Policymakers can help improve access to family planning services by making contraceptives more accessible and strengthening the Title X family planning program. In addition to helping people avoid unintended pregnancies and better space out their pregnancies, contraceptives are also critical to women's social and economic advancement, including their educational pursuits and workforce participation.31

While access to contraceptives is a cornerstone of reproductive health, it should not be used in pursuit of population control, whereby countries fearful of so-called overpopulation attempt to dictate women's reproductive choices.32 Population control has been used throughout history, from forced sterilization campaigns to requirements that recipients of public assistance receive long-acting reversible contraceptives, and each time has only served to advance systemic racism and undermine reproductive autonomy. Instead, contraceptive services must be patient-centered, and all methods—including the decision not to use contraceptives—must be respected and made accessible.

The government can improve access to family planning by expanding the availability of contraceptives at the federal and state level. For example, the Biden administration and Congress should rescind rules issued by the Trump administration that expanded religious and moral exemptions for employers, universities, and entities otherwise required to cover contraceptives without cost sharing under the Affordable Care Act's birth control benefit, which the Supreme Court upheld in a legal challenge last year.33 In addition, the Biden administration must require health plans to cover a 12-month supply of contraceptives without cost sharing; allow for over-the-counter access to contraceptives without a prescription; and eliminate medical management techniques such as quantity limits and prior authorization requirements. States, which can and should take similar administrative actions, can also submit a family planning waiver or state plan amendment to the Centers for Medicare and Medicaid Services to create limited-benefit family planning programs that improve contraceptive access for low-income women in the state.

The federal government must also strengthen Title X—the nation's only domestic program that helps meet the family planning and preventive health needs of millions of people in the United States—by increasing the program's funding and allowing past grantees that were forced out of the program due to the domestic gag rule to reenter. Since the Trump administration finalized its domestic gag rule last year, 19 grantees—including Planned Parenthood and almost a dozen state departments of health and nonprofits—have left the Title X program, reducing the network's capacity by almost half and leading to 1.6 million women losing access to services.34 While the Biden administration took an important step in mid-April by issuing a proposed rule to rescind the domestic gag rule, it can take further action by creating a reentry pathway for providers forced out of the program.35 The Title X program is in need of a funding boost as well: From 2010 to 2019, funding for the program shrunk from \$317 million to \$286 million, and the number of patients served by Title X clinics similarly decreased, from 5.22 million in 2010 to 3.1 million in 2019.36 A study in the American Journal of Public Health found that funding for Title X was less than 39 percent of what was required to adequately meet the public's family planning needs.37 In order to meet current patient need, undo the damage done by the domestic gag rule, and address systemic program underfunding that predated the rule, Congress must fund the Title X program at \$954 million as it pursues appropriations legislation later this year.38

Conclusion

The United States' response to climate change can create opportunities to promote equity and improve maternal health outcomes, here and around the world. However, as climate change affects more of the general public's daily life and its impacts on the national and global economy increasingly take center stage, the room to embed maternal health and equity in larger climate responses diminishes. The maternal health crisis has demonstrated that when policies and legislation are not put in place and the public is not aware of or invested in addressing the issue, pregnant and postpartum people as well as their families and communities are deeply affected. In addition, addressing maternal health—particularly among Black women and other women of color—should be part of broader efforts to develop a comprehensive climate response that invests in resilient and sustainable infrastructure, creates more green jobs, and prioritizes public health and environmental justice. Federal and state policymakers, as well as the public, must leverage the urgency of this moment to build off these recommendations and ensure that pregnant and postpartum people are prepared for a new climate future.

Osub Ahmed is a senior policy analyst for women's health and rights with the Women's Initiative at the Center for American Progress.

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